# **CiTO Annotation Javascript function**

Web Services

**CiTO Triples** 

What happens when a user clicks on a CiTO property?

CiTO property that was previously unselected

Value stored in user's web browser

Value stored in external database

CiTO property that was previously selected

Value stored in user's web browser

Value stored in external database

**Browser support** 

**XMLHttpRequest** 

HTML5 Local Storage

# **Usage**

To use, download the javascript folder, and reference the CiTO files in your web page using the following code:

```
<script type="text/javascript" src="./javascript/cito.js?reftype=REFTYPE"></script>
</script/cito.css">
<script language="JavaScript" type="text/javascript" src="./javascript/jquery.min.js"></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script
```

Replace REFTYPE with one of the following values, depending on the type of reference list:

- pubmed
  - PubMed Central and Europe PubMed Central
- elife
  - o elife journal
- zookeys
  - Pensoft Zookeys journal
- plos
  - o PLoS Currents journal

Open the host web page in a web browser.

# **Web Services**

# **CiTO Triples**

A web service is available to view triples submitted using the JavaScript and Chrome functions. To view, visit <a href="http://www.miidi.org/metaquery/cito">http://www.miidi.org/metaquery/cito</a>

### What happens when a user clicks on a CiTO property?

### CiTO property that was previously unselected

When a user clicks on a CiTO property that was previously unselected, the value is stored in the user's web browser and also sent to an external web service and saved in a database.

#### Value stored in user's web browser

- A key-value pair is stored in the browser's web storage facility <a href="http://en.wikipedia.org/wiki/Web\_storage">http://en.wikipedia.org/wiki/Web\_storage</a> using the following statement: localStorage.setItem(key,value);
  - The key is set to a value created by concatenating the browser window's url and the unique identifier for the HTML that forms the CiTO property 'button' in the web page.
  - O The value is set to '1'.

#### Value stored in external database

- An AJAX request is sent that inserts a record into a database hosted at www.miidi.org with the following fields:
  - o unique id for database record (auto-increment)
  - $_{\odot}$  userid unique identifier for user stored in browser's web storage facility
  - O timestamp when action was taken
  - o action = 'add'
  - o subject url for the journal article == window.location.href
  - o predicate CiTO property
  - object url (or citation text if url not available) parsed from reference item

#### record example:

| 294 | KDYXFJ4IM2RIAUBYRYUWPWO37BLNSD | Fri, 04 Jan 2013 17:25:34 GMT | add | <a href="http://elife.elifesciences.org/content/1/e00248">http://elife.elifesciences.org/content/1/e00248</a>

| <http://purl.org/spar/cito/obtainsBackgroundFrom> | <http://dx.doi.org/10.1073/pnas.0700629104>

### CiTO property that was previously selected

When a user clicks on a CiTO property that was previously selected, the value is stored in the user's web browser and also sent to an external web service and saved in a database.

#### Value stored in user's web browser

A key-value pair is stored in the browser's web storage facility <a href="http://en.wikipedia.org/wiki/Web\_storage">http://en.wikipedia.org/wiki/Web\_storage</a> using the following statement: localStorage.setItem(key,value);

- The **key** is set to a unique value created by concatenating the browser window's url and the unique identifier for the HTML that forms the CiTO property 'button' in the web page.
- O The value is set to '0'.

#### Value stored in external database

- An AJAX request is sent that inserts a record into a database hosted at <u>www.miidi.org</u> with the following fields:
  - o userid unique identifier for user stored in browser's web storage facility
  - o timestamp when action was taken
  - o action = 'remove'
  - o subject url for the journal article == window.location.href
  - o predicate CiTO property
  - object url (or citation text if url not available) parsed from reference item

### **Browser support**

With the browser-independent javascript file, the issue of browser support raises itself. There are two aspects of the code where this is relevant:

- the use of HTML5 Local Storage
- the use of XMLHttpRequest to make AJAX calls

### **XMLHttpRequest**

The code instantiates the XMLHttpRequest object with the following line: var xhr = new XMLHttpRequest();

This is supported by all modern web browsers including Chrome, Firefox, Safari, Opera and Internet Explorer 7+. It is not supported by IE6 and below.

#### **HTML5 Local Storage**

The use of HTML5 Local Storage to store local name value pairs is supported by the latest versions of the most commonly-used web browsers, as listed at <a href="http://www.html5rocks.com/en/features/storage">http://www.html5rocks.com/en/features/storage</a>

These two features of the CiTO Javascript file mean that the web browser versions listed below are the oldest that are supported:

